WHAT IS CLAIMED IS:

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1. A fuel injector, in particular a fuel injector protruding directly into a combustion chamber of an internal combustion engine, having an energizable actuator (10, 11, 12), a valve-closure member (7) able to be moved by the actuator (10, 11, 12), a secure valve seat (22), with which the valve-closure member (7) cooperates to open and close the valve, a fuel outlet formed in a downstream spray-discharge region and by at least one outlet opening (23) situated downstream from valve seat (22), and a dead volume (25) formed downstream from valve seat (22) and upstream from the spray-discharge region having at least one outlet opening (23),
wherein a device (33) for accumulating combustion chamber gas having direct access to the dead volume (25) is provided in at least one component part bordering the dead volume (25).

2. The fuel injector as recited in Claim 1,
wherein the device (33) for accumulating combustion chamber gas is designed such that the accumulated gas is not able to escape from the gas accumulation volume by buoyancy force.

3. The fuel injector as recited in Claim 1 or 2,
wherein the device for accumulating combustion chamber gas is formed by a blind hole (33) on one component part bordering dead volume (25).

4. The fuel injector as recited in Claim 1 or 2,
wherein the device for accumulating combustion chamber gas is formed by a plurality of blind holes (33) on one component part bordering dead volume (25).

5. The fuel injector as recited in Claim 3 or 4,
wherein the at least one blind hole (33) is provided on a

downstream valve needle end facing the outlet openings (23), i.e., on valve-closure member (7) on its surface facing the dead volume (25).

6. The fuel injector as recited in Claim 5, wherein the valve-closure member (7) has a spherical design, and the at least one blind hole (33) has a cylindrical form.

7. The fuel injector as recited in Claim 6, wherein the at least one blind hole (33) runs along the longitudinal valve axis (2).

8. The fuel injector as recited in one of the preceding claims, wherein the spray-discharge region having the at least one outlet opening (23) as base part (19) of a valve-seat member (16) having the valve seat (22) is convexly curved.

9. The fuel injector as recited in one of the preceding claims, wherein the fuel injector protrudes into the combustion chamber of an externally ignited internal combustion engine.

10. The fuel injector as recited in one of Claims 1 through 8, wherein the fuel injector protrudes into the combustion chamber of a self-igniting internal combustion engine.